

REMARKS

Applicant requests reconsideration of the application in view of the following remarks. The outstanding issues are:

- Claims 36, 37 and 38 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,645,065 issued to Shapiro et al. (hereinafter *Shapiro*)
- Claims 36, 37, 39 and 40 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,638,819 issued to Manwaring et al. (hereinafter *Manwaring*) in view of U.S. Patent No. 4,654,701 issued to Yabe (hereinafter *Yabe*)

I. In General

Applicant would like an opportunity to conduct an Examiner interview to expedite the prosecution of this case and requests an Examiner interview prior to the Examiner acting on this response.

Claims 1, 6-13, 15, 22, 26, 29, 31, and 36-41 are pending. Applicant thanks the Examiner for allowing claims 1, 6-13, 15, 22, 26, 29 and 31. Applicant has amended independent claim 36. New claim 41 has been presented for consideration.

II. Rejections under 35 U.S.C. §102

Claims 36, 37 and 38 stand rejected under 35 U.S.C. §102(b) as being anticipated by *Shapiro*. According to the Office Action, *Shapiro* “teaches a catheter position and orientation system that includes a display located on the tool for indicating position, orientation, and depth.” Therefore, according to the Office Action, an “indication of current position, orientation, and depth will give the surgeon using the device a reference with respect to a desired position and direction of movement.”

Applicant respectfully traverses this rejection. The Examiner appears to be relying on the catheter of *Shapiro* to teach “a tool” as recited in claim 36 and “a surgical tool” as recited in claims 37 and 38. Applicant submits that in *Shapiro*, a display is not “disposed on” the catheter as required by independent claim 36. Applicant further submits that in *Shapiro*, a display is not “mounted on” the catheter as required by independent claim 37. Instead, in *Shapiro* the position of the catheter is indicated by a probe which is separate from the catheter and not “disposed” or “mounted” on the catheter. See column 6 and FIGURES 10A, 10B and 11 of *Shapiro*. Accordingly, Applicant submits that independent claims 36 and 37 and dependent claim 38 are not anticipated by *Shapiro*.

In view of the above, Applicant requests withdrawal of the rejection of claims 36, 37, and 38 under 35 U.S.C. §102(b).

III. Rejections Under 35 U.S.C. §103

Claims 36, 37, 39 and 40 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Manwaring* in view of *Yabe*. According to the Office action, "it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the endoscope of *Yabe* with the system of *Manwaring* et al. to allow the information regarding the position, orientation, and trajectory of the endoscope be displayed on the endoscope itself where it may be conveniently viewed by the surgeon while guiding the endoscope along the selected trajectory."

Applicant requests that the problem being addressed by the present invention as recited in claims 36, 37, 39 and 40 be kept in mind upon reconsideration of the rejected claims. As explained, on page 2, lines 1 to 13 of the present application,

Although image guided surgery systems are more accurate and provide the surgeon with more information compared to previous techniques, it is sometimes difficult to visualize, with reference to image data displayed on the monitor, the manipulation required to place the surgical tool in the desired position and orientation. As will be appreciated, the surgeon is required to visualize the position of the tool with respect to the image data and then relate that information to a required motion of the tool in relation to the patient.

The prior arguments with respect to the Examiner's *prima facie* case of obviousness submitted by Applicant in the Amendment filed June 20, 2001, are believed to still be applicable to the above rejection of record and are, accordingly, incorporated herein. Applicant respectfully requests that the Examiner reconsider Applicant's previous arguments, with respect to insufficient motivation to combine the references, in combination with the comments set forth below.

Furthermore, it is well settled that "[t]o establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art," see M.P.E.P. § 2143.03 citing *In re Royka*, 490 F.2d 981 (CCPA 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385 (CCPA 1970). Applicant submits that even if there was sufficient motivation to combine the teachings of *Manwaring* and *Yabe*, the present invention as recited in claims 36, 37, 39 and 40 would not result. Application submits that even if *Manwaring* and *Yabe* were combined, all the claim limitations of each of the independent claims 36, 37 and 39 and dependent claim 40 would not be met.

Applicant submits that specifically, the following claim limitations would still not be met: “a display . . . for indicating differences between the position of the tool and the desired position of the tool, wherein said differences are indicated with respect to the tool” as recited in amended independent claim 36; “a display . . . for indicating a direction in which the display should be moved” as recited in independent claim 37; and “indicating on a display . . . the direction in which the tool must be moved . . . , wherein said indication is provided with reference to a reference frame of said surgical tool” as recited in independent claim 39.

Applicant submits that the cited references do not teach or suggest the above recited elements of each of the independent claims 36, 37 and 39 and as such, even if the two references were combined, all the claim limitations would not be met. Accordingly, Applicant submits that independent claims 36, 37 and 39 and dependent claim 40 are not unpatentable over *Manwaring* in view of *Yabe*.

In view of the above, Applicant requests withdrawal of the rejection of claims 36, 37, 39 and 40 under 35 U.S.C. §103(a).

IV. New Claim 41

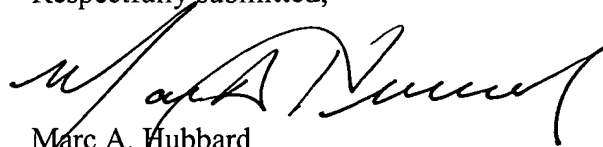
New claim 41 has been added for purposes of defining the invention in a different way, and is not being submitted to overcome the prior art rejections noted above. This claim adds no new matter to the application and is supported in the specification as originally filed, for example, on page 3, lines 19-27 and page 6, lines 24-26. Applicant submits that the new claim is allowable for at least the same reasons that independent claim 37 is allowable.

CONCLUSION

It is submitted that the application is in condition for allowance. Such action is respectfully requested. Please telephone the undersigned representative should he be of any assistance.

Applicant submits herewith a Petition for Revival of an Application for Patent Abandoned Unintentionally under 37 C.F.R. § 1.137(b) along with the fee of \$640.00. The Director is hereby authorized to charge any deficiency payments or credit any overpayments associated with this communication to Deposit Account No. 13-4900 of Munsch Hardt Kopf & Harr, P.C.

Respectfully submitted,



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CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to Director of the U.S. Patent and Trademark Office, Washington, D.C. 20231, on the date below.

Jacqueline Butler
Name

August 2, 2002
Date

VERSION OF AMENDED CLAIMS WITH MARKINGS TO SHOW CHANGES

36. (Twice Amended) An apparatus comprising:
a tool for use in connection with surgery;
means for determining a position of the tool relative to a desired position of the tool; and
a display disposed on the tool for indicating differences between the position of the tool and the desired position of the tool, wherein said differences are indicated with respect to the tool.

--41. (New) An apparatus, comprising:
a hand-held surgical tool operable to be inserted into a patient;
a tool position tracker for tracking position of said hand-held tool with respect to a reference frame; and
a display mounted on said hand-held surgical tool for visually indicating a direction in which said display mounted on said tool should be moved to reach a desired position for said hand-held surgical tool based at least in part on said position of said tool as determined by said tool position tracker, wherein said direction is provided with reference to a reference frame of said hand-held surgical tool.--